SANTA CRUZ BIOTECHNOLOGY, INC.

RWDD1 (C-8): sc-514496

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RWDD1 (RWD domain containing 1), also known as CGI-24 or PTD013, is a 243 amino acid protein belonging to the RWDD1/GIR2 family. RWDD1 interacts with DRG2 (developmentally regulated GTP binding protein 2), which it protects it from proteolytic degradation. DRG2 is a cytoplasmic protein involved in cell proliferation, differentiation and death. Containing an RWD domain at its N terminal region, RWDD1 is encoded by a gene located on human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Nagase, T., et al. 1997. Prediction of the coding sequences of unidentified human genes. VII. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 4: 141-150.
2. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
3. Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. Am. J. Med. Genet. A 130A: 160-164.
4. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
5. Safadi, S.S. and Shaw, G.S. 2007. A disease state mutation unfolds the parkin ubiquitin-like domain. Biochemistry 46: 14162-14169.

CHROMOSOMAL LOCATION

Genetic locus: RWDD1 (human) mapping to 6q22.1; Rwdd1 (mouse) mapping to 10 B1.

SOURCE

RWDD1 (C-8) is a mouse monoclonal antibody raised against amino acids 55-122 mapping within an internal region of RWDD1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RWDD1 (C-8) is available conjugated to agarose (sc-514496 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514496 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514496 PE), fluorescein (sc-514496 FITC), Alexa Fluor® 488 (sc-514496 AF488), Alexa Fluor® 546 (sc-514496 AF546), Alexa Fluor® 594 (sc-514496 AF594) or Alexa Fluor® 647 (sc-514496 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514496 AF680) or Alexa Fluor® 790 (sc-514496 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

RWDD1 (C-8) is recommended for detection of RWDD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RWDD1 siRNA (h): sc-95532, RWDD1 siRNA (m): sc-153180, RWDD1 shRNA Plasmid (h): sc-95532-SH, RWDD1 shRNA Plasmid (m): sc-153180-SH, RWDD1 shRNA (h) Lentiviral Particles: sc-95532-V and RWDD1 shRNA (m) Lentiviral Particles: sc-153180-V.

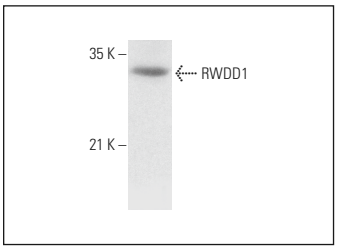
Molecular Weight of RWDD1: 28 kDa.

Positive Controls: human skeletal muscle extract: sc-363776.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RWDD1 (C-8): sc-514496. Western blot analysis of RWDD1 expression in human skeletal muscle tissue extract.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.